

OPEN LETTERS.

NEW SPECIES.

To the Editors of the Botanical Gazette :—Your editorial on "New Species," in the April number, emphasizes a line of thought that kept me for many years from publishing any of the undescribed forms of fungi that came to my notice. It seemed presumptuous for an isolated worker, having access to but few books or authentic specimens, to attempt to describe new species in groups where the literature and synonymy were in such confusion that the best equipped mycologist could seemingly only flounder in the mire.

Farther reflection, and the problems encountered in attempting the study of our southern mycological flora, in which so large a proportion of the forms observed are evidently undescribed, have led me to change my views. You say that in former days "classification was confessedly artificial, the purpose being little more than a convenient cataloguing of forms." Very good, and I would add that in these lower groups the condition you describe still exists, and until we get a fairly complete "convenient catalogue" I see no alternative but to continue making "new species" of such discovered forms as seem to be undescribed. No one appreciates more fully than the makers of these species that their work is only tentative; but how are we to base a classification "upon genetic relationships as indicated by a careful study of morphology" until we at least know of the existence of the forms that are to be classified; and how is this knowledge to be obtained unless each observer makes a permanent record of the new forms he discovers?

I have come to quite agree with the views of a brilliant young zoologist and botanist, one of the few who in recent years have made a reputation in both fields, when he expressed the thought that it was not the occasional renaming of old species and the consequent multiplication of synonyms that produced serious confusion in nomenclature. When such new names are accompanied by sufficient and carefully drawn descriptions they do but little harm. It is the publishing of names with slovenly and unrecognizable descriptions, and the carelessly erroneous reference of new forms to old species that have caused an almost hopeless condition of chaos in some of these lower groups.

When a reasonably complete number of the forms that actually occur in nature of parasitic fungi and other low plants have been collected, named,

described and catalogued, then and not till then will it be possible to trace their relationships and to express their true affinities by means of a thoroughly well considered natural classification. The student who concerns himself alone with the higher plants cannot appreciate the difficulties that still remain to be surmounted before this highly desirable end can be attained, or there would be fewer to criticise the efforts of those who are doing what is well understood to be preliminary work, but work that is just as essential to botanical progress as that which is to follow. Those of us who are attempting to work with these perplexing and almost innumerable forms, and are therefore in a position to judge of the immensity of this field and the utterly inadequate study it has so far received, are compelled to smile when we hear some young anatomist or physiologist gravely assert that "work in systematic botany is practically finished in this country." It seems to be the fashion in some quarters to decry all field workers as "mere collectors;" and I have even seen the assertion that the time has passed when amateurs, or those who were not able to devote their whole time to botanical study, could hope to do any work that would be of real service to botanical progress. I cannot help thinking that these are narrow views, and that their publication tends to work harm by discouraging those who feel attracted by botanical studies. The busy man, whose love of nature compels him to spend his Sundays and holidays in the woods and fields, often gains that intimate knowledge of plants as they really are, and of their relationship to their environment that is sometimes sadly lacking in the professional botanist whose horizon is bounded by his laboratory walls. The true scientific spirit is that which utilizes every scrap of knowledge, no matter how humble the source, and encourages by every means possible the widest spread of the spirit of exact observation.—F. S. EARLE, *Alabama Polytechnic Institute, Auburn, Ala.*